

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

62.27

... Hybrid Corn

File with 1042

LIBRARY

RECEIVED

★ MAR 12 1942 ★

U. S. Department of Agriculture

Hybrid Corn



the Corn of Plenty

Preview Of 1943 Hybrids

PIONEER makes an outstanding yield record in 1941 IOWA CORN YIELD TEST

Highest Yield

IN THREE OUT OF TWELVE DISTRICTS
AMONG COMMERCIAL HYBRIDS

Highest Yield

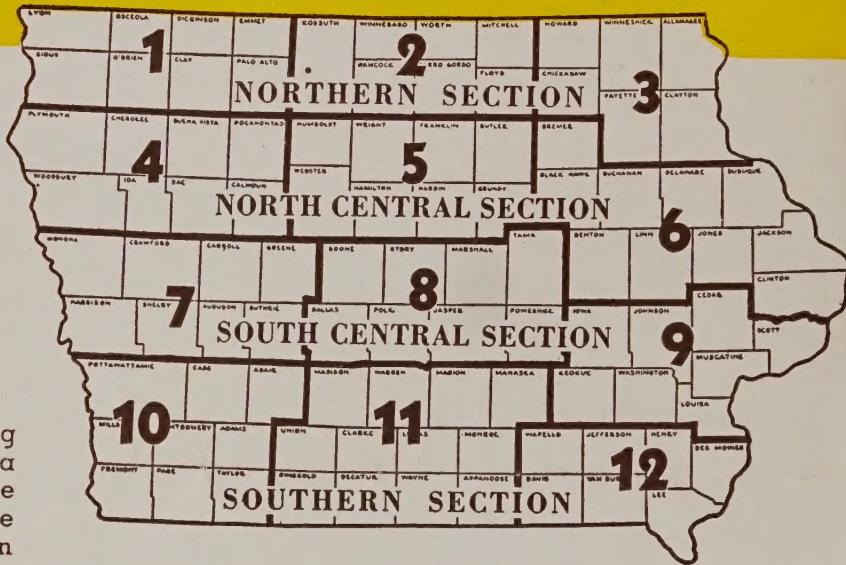
IN TWO OF THE FOUR SECTIONS
AMONG COMMERCIAL HYBRIDS

● Pioneer 333 produced the highest average yield among 104 commercial hybrids in the North Central Section with a yield of 84.07 bushels per acre, and Pioneer 336 made the highest average yield among 75 commercial hybrids in the Southern Section with a yield of 65.43 bushels per acre in the official 1941 Iowa Corn Yield Test. Seventy-one producers entered 1,065 commercial hybrids in the 12 districts.

PIONEER ranks high in long-time averages

● Long time averages are more significant than "one year" results in yield tests. Pioneer 322 and 307 hold 8 of the 16 first place positions for long time averages in general performance shown in the 1941 Iowa Corn Yield Test bulletin. Pioneer 322 ranks FIRST for resistance to lodging among all hybrids tested for six and five years in the Northern Section.

Years Average	Rank for General Performance	Pioneer Number	Yield Average
NORTHERN SECTION			
6	First	322	70.9 bu.
5	First	322	74.5
4	First	322	72.0
3	First	322	71.9
NORTH CENTRAL SECTION			
6	First	322	71.2
5	First	322	75.6
4	First	307	81.5
3	Second	307	79.5
SOUTH CENTRAL SECTION			
4	First	307	80.8
3	Third	307	80.9
5 and 6 year averages not reported in bulletin			
SOUTHERN SECTION			
4	Second	307	74.8
3	Fifth	307	74.5
5 and 6 year averages not reported in bulletin			



● The test is conducted cooperatively by the Iowa Agricultural Experiment Station, the Iowa Corn and Small Grain Growers' Association and U. S. D. A. The state is divided into 12 districts. One testing field is located in each district. The 12 districts are combined to form 4 sections with 3 districts each.

1941 MINNESOTA CORN YIELD TRIALS

Highest Yield in 5 of 11 Fields

● Pioneer hybrids produced the highest yields in 5 of the 11 test fields. In all test fields, there was a total of 33 "adapted corn" groupings among early, medium early, and medium late hybrids. Pioneer alone made highest yields in one-third of the 33 groupings.

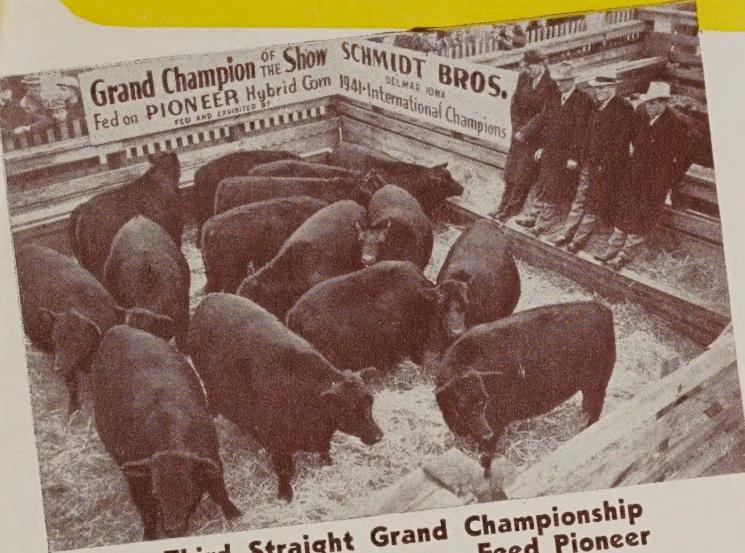
Pioneer 353-A produced highest yields in Group I (Early Hybrids) in 2 of the 3 Southern Zone fields . . . and Pioneer 353 ranked at or near the top in yield in 6 of the 7 fields in the Southern and South Central Zones. Both 353 and 353-A were outstanding for resistance to stalk breaking.

1941 ILLINOIS CORN PERFORMANCE TEST

Pioneer Makes Highest Yield

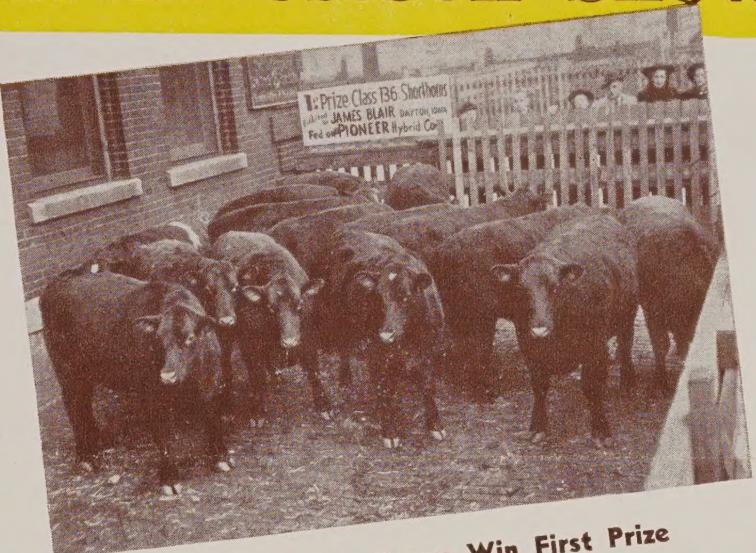
● A Pioneer hybrid produced the highest yield made in the test . . . 131.4 bushels per acre. In the long-time general performance averages (includes 2, 3, 4 and 5 year results) reported in the 1941 test bulletin, Pioneer hybrids hold over one-half of all possible first place positions.

Some of PIONEER-FED Livestock That Won Championship Honors at 1941 International Livestock Show



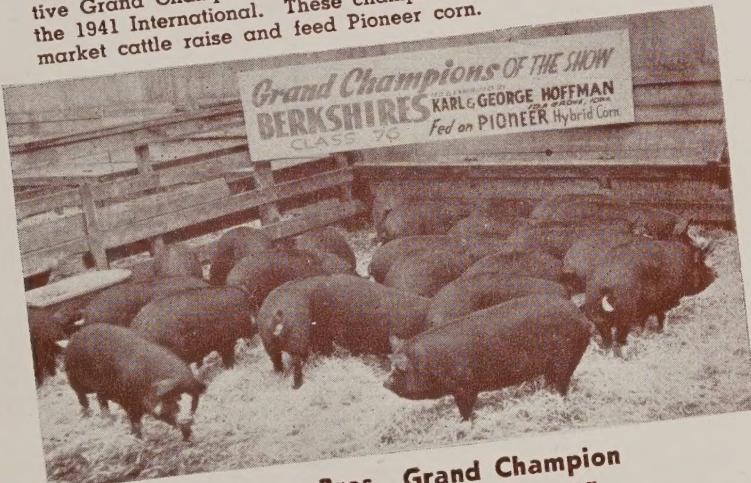
Third Straight Grand Championship For Schmidt Bros. . . . Feed Pioneer

• Schmidt Brothers, Delmar Iowa, won their third consecutive Grand Championship in the carlot show of fat cattle, at the 1941 International. These champion feeders of show and market cattle raise and feed Pioneer corn.



Pioneer-Fed Shorthorns Win First Prize

• James Blair, Dayton, Iowa, another grower and feeder of Pioneer, won first prize in light-weight division of Shorthorn class with his prime carlot of Shorthorn Steers.



Hoffman Bros., Grand Champion Carlot Hogs Fed on Pioneer

• These Pioneer-fed purebred Berkshires won Grand Champion award in 1941 International Carlot hog show. Exhibited by Hoffman Bros., outstanding feeders of Ida Grove, Iowa.



Pioneer-Fed Herefords Win For Hoffman Bros.

• Winners again this year were Hoffman Bros., Ida Grove, Iowa, whose carlot of Pioneer-fed and Pioneer finished light-weight Hereford steers won the championship of the Hereford breed.

PIONEER Corn Makes... Highest Yield

2 Highest Yields in Official 1941 Iowa 10-Acre Yield Contest

Pioneer hybrid corn made the two highest yields—138.6 and 134.7 bushels per acre—in the official 1941 Iowa 10-Acre Yield Contest, conducted under the supervision of the Iowa Corn and Small Grain Growers Association.

Fifty-three local contests were conducted all over the state. Pioneer made highest yields in 20 contests. A total of 751 farmers entered fields; 161 of them produced yields of 100 bushels per acre or more to win "Master Corn Grower" awards. A total of 71 of the 161 Master Corn Growers planted Pioneer to win.

This was the second time in three years a Pioneer field has produced the highest yield. Raymond McClure, Poweshiek County, holds the highest yield ever recorded in the contest—163.2 bushels per acre, made in 1939 with Pioneer corn. He holds the highest 3-year yield average with 140.3 bushels per acre, having produced 163.2, 134.4, and 123.5 bushels per acre respectively during the last three years (1939, '40, '41) with Pioneer hybrid corn.



• Clare Myers and son, of Grundy County, made the highest yield in the official 1941 Iowa 10-Acre Yield Contest—138.6 bushels per acre—made with Pioneer hybrid corn. Second highest yield—134.7 bushels per acre—went to Edmund McGough, Franklin County, who also planted Pioneer Corn.

PIONEER Hybrids AVAILABLE FOR 1943-

PIONEER 359

Reservations on 359 limited to one-half bushel per customer

- ★ High Yielding
- ★ Stiff Stalked
- ★ Earliest Pioneer Hybrid

● Produces high yields and stands up exceptionally well for corn of its maturity. Unlike most early corns, it is the type of corn that hogs and cattle like—has well dented, medium soft starch kernels and excellent quality ears.

PIONEER 358

- ★ Short Stalks, Big Ears
- ★ Medium Soft Grain
- ★ High Yield

● This "little giant" hybrid grows short stalks, but produces surprisingly large, well shaped, heavy ears. Kernels are well dented and medium soft in texture. Matures, stands and yields like 355, but develops shorter shanks, and resists smut better. Ears husk out clean and easy for hand or machine pickers.

PIONEER 355

- ★ A Dependable Hybrid
- ★ Deep Kernels, Small Cobs
- ★ Good on Alkali, Peat

● A favorite standby in Northern Corn Belt. Comes through the ground fast, stands up well, yields sound ripe corn that can be fed, marketed, or sealed without delay. Usually overruns measured cribs 5 to 15 per cent when shelled—has long, small cob ears filled with deep kernels. Thrives well on alkali, grows especially well on peat.

PIONEER 373

- ★ Silage, Fodder Corn
- ★ Large Attractive Ears
- ★ Picks Clean, Easy

● Good silage and fodder corn. Grows tall stalks, yields big tonnage of dark green foliage, makes a large crop of grain. Plants are attractive, dressy, uniform looking. May stalk break some in the fall on high nitrogen soil. Produces single eared stalks, large uniform ears with medium soft starch, and deep sound kernels. Picks clean with machine, husks easy by hand.



FOR NORTHERN CORNBELT

PIONEER 353

- ★ Extra High Yield
- ★ Strong Roots, Stiff Stalks
- ★ Thick Ears, Deep Grain

● Gives you both extra high yield and excellent lodging resistance with safe maturity. Develops very strong roots and very stiff stalks. Stood up excellently throughout 1941 season when many hybrids lodged badly. Yields rather thick, medium length ears with very deep kernels. Leaves very little ear and shelled corn in field when harvested with machine.

In the 1941 Minnesota Corn Yield Trials, conducted by University of Minnesota, Pioneer 353 consistently ranked at or near the top in yield in six of the seven test fields located in the Southern and South Central Zones.

PIONEER 353-A

- ★ Resists Wind, Drought
- ★ Single Eared Stalks
- ★ High Yield of Grain

● Stands up in windstorms, resists drought, gives large yields of grain and fodder. Grows tall, looks well in field, produces good quality foliage excellent for ensilage or fodder. Cylinder shaped ears retain width to tip, are sound, heavy in weight, have deep dimple dent, medium soft starch grain. Made the highest yields in two of the three Southern Zone fields in the official 1941 Minnesota Corn Yield Trials.

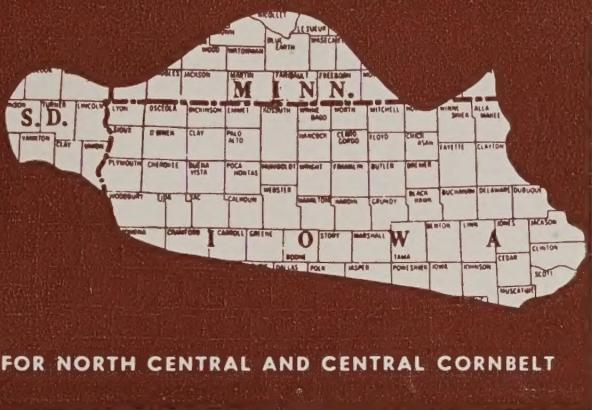
ESTI
MAT
DFFE
AM
PIO
HY
IN
EAR
358
353
322
341
330
307
317
300
332
LAT

—SELECT YOUR HYBRIDS AND RESERVE YOUR SEED

ESTIMATED
Maturity
Differences
Long
Hybrids
Days

TEST
359
355
367
373
353A
324
340
333
334
336

TEST



FOR NORTH CENTRAL AND CENTRAL CORNBELT

PIONEER 330

- ★ Rough, Soft-starch Ears
- ★ Single Eared Stalks
- ★ Uniform Ears, Plants

● A popular, high yielding, rough eared hybrid with soft starch, good quality kernels, and single eared stalks. Produces dressy looking corn, has extreme plant uniformity and very even ear height. Ears pick clean, break out of husk easy. May drop few ears. Stalks disc up easily. Stalks are sometimes brittle in mid-summer, but become very stiff in autumn.

Has become one of the most popular hybrids grown in Central and North Central Iowa. Reserve your 1943 supply now.

PIONEER 340

- ★ Extra High Yielding
- ★ Moderately Rough Ears
- ★ Very Stiff Stalks

● A new, extra high yielding, stiff stalked corn. Grows dark green stalks and leaves. Produces one ear per stalk. Yields good quality ears with well dented, moderately rough, medium soft starch kernels. Long husks protect ear tips from grain damage. Ears hang fairly low on stalks—handy to husk by hand.

Resists smut excellently. Holds very high yield records in Pioneer tests conducted in North Central Iowa. Very resistant to dropped ears.

PIONEER 322

- ★ High Yielding Hybrid
- ★ Well Liked by Feeders
- ★ Deep Kernels, Small Cobs

● A dependable, general purpose corn. Stalks grow high, produce plenty of fodder and yield lots of grain. Feeders like 322. Ears contain medium soft starch, have deep kernels, small cobs. Generally overruns measured cribs around 10 per cent when shelled. Has excellent long-time lodging resistance record. Husks easy by hand, picks clean all day with machine.

In common with many very stiff stalked hybrids, 322 was affected in some sections last fall by a particular stalk rot which was unusually active. On the average, 322 is very stiff stalked. Pioneer 322 has the best lodging resistance among all hybrids tested for five years (1936-40) in both the Northern and North Central Sections of the official Iowa Corn Yield Test.

PIONEER 341

Reservations on 341 limited to one-half bushel per customer

- ★ A New Variety
- ★ Produces Rough Ears
- ★ Soft Starch Kernels

● This new variety matures slightly later than 322, has rough, deep kernel ears. Hogs and cattle like its soft starch texture. Ear type is similar to 330. Stands up strongly, produces good roots and very stiff stalks, good ear appearance, single eared stalks, and drops practically no ears.

Earlier than 330. A good companion hybrid to grow with 322—it matures slightly later, grows shorter stalks, has lower ear height, and shells less when picked with a mechanical picker.

PIONEER 324

- ★ Gives High Yields
- ★ Uniform Looking Fields
- ★ One Large Ear Per Stalk

● Pioneer 324 yields a big crop of large, showy ears. Ears hold their width well from butt to tip, have medium dent kernels, deep grain, run uniform in size and appearance. Plants look attractive. Stalks stand even in height, bear wide, healthy looking leaves. Ears hang evenly at a convenient height for husking.

Kernels contain medium hard starch, have high shelling percentage, market at top grade. Good sealing corn in North Central Iowa. Keeps well in the crib.

PIONEER *Hybrids*

FOR SOUTH CENTRAL
AND SOUTHERN IOWA

Available for 1943

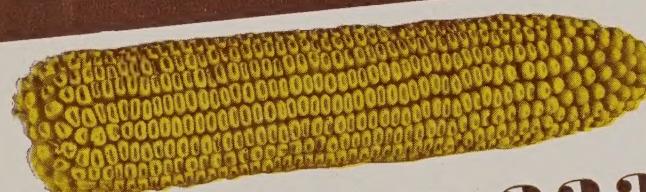
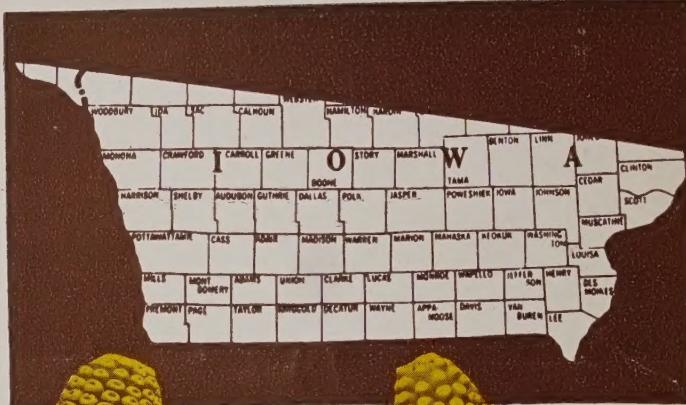


PIONEER 334

ONE LARGE EAR PER STALK—MEDIUM SOFT STARCH—
DARK GREEN PLANTS

- Good type of corn for feeding and marketing purposes. Produces dark green, leafy plants, single eared stalks and fairly large, medium soft starch ears. Ears hang evenly, are borne low on stalks. Resists both stalk and ear smut. Easily harvested by hand and machine pickers. A high yielding, attractive looking hybrid.

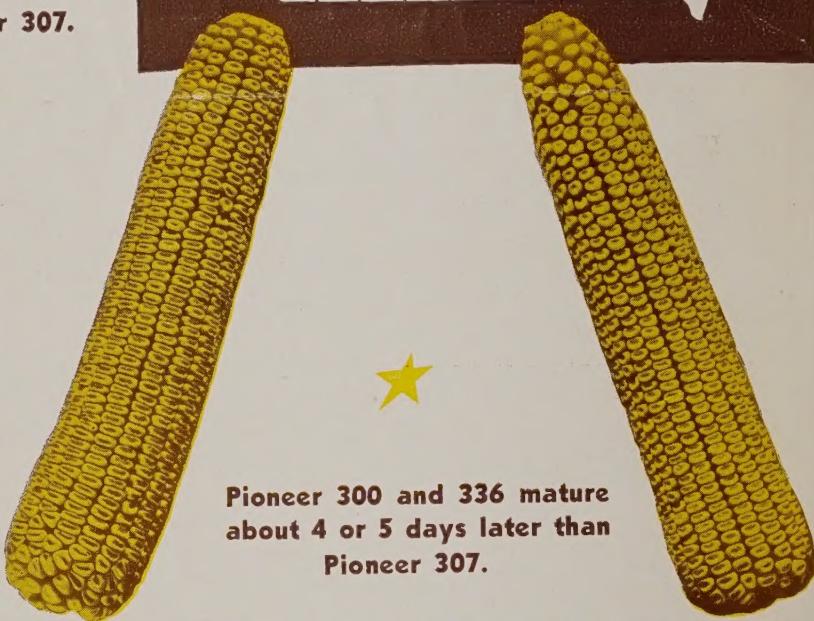
Pioneer 334,
333, and 317
have about
same matur-
ity as Pio-
neer 307.



PIONEER 333

SUPERIOR STANDING ABILITY—HIGH YIELDING—
PICKS CLEAN WITH MACHINE

- A rugged, high yielding variety which features exceptionally strong roots and stiff stalks. Ears run one-to-the-stalk, are uniform in size, cylindrical in shape, and hold their width well from butt to tip. Kernels have a medium dent—grow deep and plump, excel in quality and weight. Picks clean with mechanical picker.



Pioneer 300 and 336 mature
about 4 or 5 days later than
Pioneer 307.

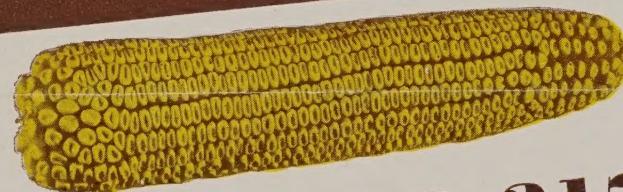
PIONEER PIONEER 300 336

- ★ LARGE, FAIRLY ROUGH EARS
- ★ SOFT STARCH KERNELS
- ★ GOOD SILAGE, FODDER CORN

- Yields large, rather rough, medium soft starch ears that run uniform in size and cylindrical in shape. Gives rough dent corn under conditions where many hybrids turn smooth and flinty in Southern Iowa. Very high yielding variety. Looks beautiful in field, stands tall, yields big tonnage of silage and fodder. Ears husk out easy and clean. Resists drought and smut.

- ★ LONG EARED HYBRID
- ★ VERY HIGH YIELDING
- ★ STANDS UP WELL

- Long eared, very high yielding hybrid. Produces one large ear per stalk. Has medium dent kernels, contains medium-soft starch, yields good quality ears. An easy husking, clean picking hybrid with ears attached on stalks at a convenient height for huskers. Develops strong roots and stalks . . . stands up strongly.



PIONEER 317

PRODUCES LARGE, SINGLE EARS—LEAFY UNIFORM
PLANTS—HUSKS OUT CLEAN

- A general purpose corn. Produces vigorous, leafy, uniform plants. Yields one ear per stalk. Carries ears at an even, fairly low height. Long husks keep ears protected from mold and tip damage. Ears husk out very clean. Stands up exceptionally well, has very stiff stalks.

PIONEER 307

HIGH YIELDING—OVERRUNS WHEN SHELLED—STIFF STALKS

- Stalks produce fairly heavy foliage, stand up well, look impressive in the field. Some stalks produce two ears under favorable conditions. Ears become well dented, contain medium hard starch, have deep grain, small cobs. They weigh out heavily, have sound, solid kernels—often overrun measured cribs up to 15 per cent when shelled. Used by many as fodder and ensilage corn.

Performance Ratings of PIONEER Hybrids

BASED ON AVERAGE RESULTS
FROM PIONEER YIELD TESTS

Records shown below under each of the 3 maturity belts are based on averages of several years testing in Pioneer hand planted, replicated test fields. Twenty hills of each entry are planted in six different locations in each field and averaged at harvest time. A number of fields are planted annually in each maturity belt and results averaged. Then results of preceding years are averaged with latest figures.

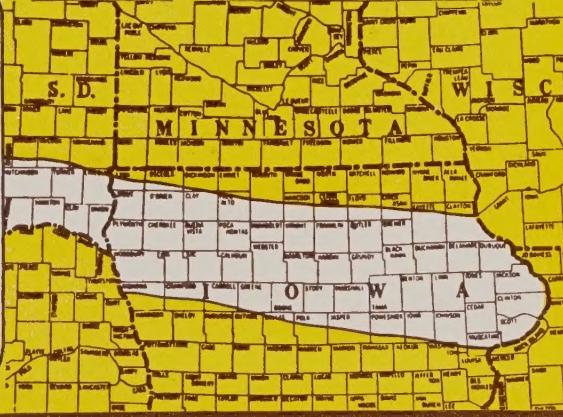
Pioneer Number	Average Yield Per Acre	Average Moisture Oct. 15	Root Lodging Resistance Grade The Higher the Better	Average Number Broken 100 Stalks	Average Number Dropped Ears Per 100 Stalks	Average Ear Height
359	66 bu.	16.4%	85	2	.1	40 in.
355	67	17.1	72	3	.8	46
358	66	17.3	68	5	1.5	39
367	72	17.7	75	6	.5	42
373	70	17.7	74	10	.3	49
353	78	19.0	80	3	.3	52
353A	76	19.0	80	6	1.1	55
322	76	20.8	80	10	.5	56
324	76	20.8	77	10	.8	54

NORTHERN CORN BELT LISTED ACCORDING TO MOISTURE CONTENT



Pioneer Number	Average Yield Per Acre	Average Moisture Oct. 15	Root Lodging Resistance Grade The Higher the Better	Average Number Broken 100 Stalks	Average Number Dropped Ears Per 100 Stalks	Average Ear Height
353A	70 bu.	15.8%	76	4	.8	51 in.
353	72	15.9	77	2	.2	49
322	73	16.6	77	9	.5	52
324	73	16.9	74	7	.7	48
340	77	17.4	80	3	.1	49
341	74	17.4	78	3	.1	42
330	75	17.6	89	3	.7	45
307	78	18.4	72	7	.4	57
333	77	18.4	78	2	.2	55
334	75	18.5	70	5	.6	55

NORTH CENTRAL IOWA LISTED ACCORDING TO MOISTURE CONTENT



Pioneer Number	Average Yield Per Acre	Average Moisture Oct. 15	Root Lodging Resistance Grade The Higher the Better	Average Number Broken 100 Stalks	Average Number Dropped Ears Per 100 Stalks	Average Ear Height
330	71 bu.	15.1%	92	1	1.4	43 in.
341	71	15.1	85	2	.3	40
340	72	15.4	80	1	.2	45
333	73	16.2	92	2	.6	50
334	73	16.2	76	4	.8	49
307	74	16.2	80	5	.6	53
317	73	16.3	80	2	.6	50
336	77	16.5	80	2	1.5	55
300	76	17.0	75	3	.5	57
332	76	18.2	82	2	.5	61

CENTRAL AND SOUTHERN IOWA LISTED ACCORDING TO MOISTURE CONTENT



Summary of Characteristics of Pioneer Hybrids

• The characteristics of the hybrids listed below are based on comparisons with the average Pioneer hybrid—not on comparisons with the average open-pollinated or competitive corns. For instance where a hybrid rates "Fair" for stiffness of stalks in tables below, it might actually rate "Very Stiff" if compared with open-pollinated.

PIONEER.....	340	341	330	334	333	307	317	300	336	332
STRENGTH OF ROOTS.....	STRONG	STRONG	VERY STRONG	MEDIUM STRONG	VERY STRONG	STRONG	STRONG	MEDIUM STRONG	STRONG	STRONG
STIFFNESS OF STALKS.....	VERY STIFF	VERY STIFF	VERY STIFF	STIFF	VERY STIFF	STIFF	VERY STIFF	STIFF	STIFF	STIFF
EAR DROPPING RESISTANCE.....	GOOD	EXCELL'T	GOOD	GOOD	EXCELL'T	EXCELL'T	EXCELL'T	GOOD	GOOD	GOOD
ADAPTATION TO HAND PICKING.....	EXCELL'T	GOOD	EXCELL'T	EXCELL'T	EXCELL'T	FAIR	GOOD	EXCELL'T	EXCELL'T	GOOD
CLEANNESS OF HUSKING WITH MACHINE PICKER.....	CLEAN	CLEAN	VERY CLEAN	CLEAN	CLEAN	VERY CLEAN	CLEAN	CLEAN	CLEAN	CLEAN
SHELLING RESISTANCE WHEN PICKED WITH MACHINE.....	GOOD	GOOD	EXCELL'T	GOOD	GOOD	FAIR	GOOD	FAIR	GOOD	GOOD
LENGTH OF SHANK.....	MEDIUM	MEDIUM	SHORT	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM
EARS PER STALK.....	ONE	ONE	ONE	ONE	ONE	Sometimes TWO	ONE	ONE	ONE	ONE
EAR HEIGHT.....	MEDIUM LOW	LOW	LOW	MEDIUM LOW	MEDIUM	MEDIUM HIGH	MEDIUM	MEDIUM HIGH	MEDIUM	HIGH
LENGTH OF EARS.....	MEDIUM	MEDIUM	MEDIUM	MEDIUM LONG	MEDIUM	MEDIUM LONG	MEDIUM	LONG	MEDIUM	MEDIUM
HARDNESS OF KERNEL STARCH.....	MEDIUM SOFT	SOFT	SOFT	MEDIUM SOFT	MEDIUM	MEDIUM HARD	MEDIUM	MEDIUM SOFT	MEDIUM	MEDIUM SOFT
LENGTH OF HUSK.....	LONG	MEDIUM	LONG	LONG	LONG	LONG	LONG	LONG	LONG	LONG
SMUT RESISTANCE.....	EXCELL'T	GOOD	EXCELL'T	EXCELL'T	EXCELL'T	GOOD	EXCELL'T	EXCELL'T	GOOD	GOOD
DROUGHT RESISTANCE.....	GOOD	GOOD	GOOD	EXCELL'T	GOOD	EXCELL'T	GOOD	EXCELL'T	GOOD	GOOD

PIONEER.....	359	358	355	367	373	353	353A	322	324
STRENGTH OF ROOTS.....	VERY STRONG	MEDIUM STRONG	STRONG	STRONG	STRONG	VERY STRONG	VERY STRONG	VERY STRONG	STRONG
STIFFNESS OF STALKS.....	VERY STIFF	VERY STIFF	VERY STIFF	STIFF	FAIR	VERY STIFF	VERY STIFF	STIFF	STIFF
EAR DROPPING RESISTANCE.....	EXCELL'T	GOOD	GOOD	EXCELL'T	EXCELL'T	EXCELL'T	EXCELL'T	EXCELL'T	GOOD
ADAPTATION TO HAND PICKING.....	GOOD	EXCELL'T	GOOD	GOOD	GOOD	FAIR	GOOD	GOOD	FAIR
CLEANNESS OF HUSKING WITH MACHINE PICKER.....	CLEAN	CLEAN	CLEAN	CLEAN	VERY CLEAN	FAIR	FAIR	VERY CLEAN	FAIR
SHELLING RESISTANCE WHEN PICKED WITH MACHINE.....	GOOD	GOOD	GOOD	GOOD	GOOD	EXCELL'T	EXCELL'T	FAIR	EXCELL'T
LENGTH OF SHANK.....	MEDIUM	MEDIUM	LONG	MEDIUM	MEDIUM	MEDIUM	MEDIUM	SHORT	MEDIUM
EARS PER STALK.....	ONE	ONE	Sometimes TWO	Sometimes TWO	ONE	ONE	ONE	Sometimes TWO	ONE
EAR HEIGHT.....	LOW	LOW	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM HIGH	MEDIUM
LENGTH OF EARS.....	MEDIUM	MEDIUM	LONG	MEDIUM	LONG	MEDIUM	LONG	MEDIUM LONG	LONG
HARDNESS OF KERNEL STARCH.....	MEDIUM SOFT	MEDIUM SOFT	MEDIUM HARD	HARD	MEDIUM SOFT	MEDIUM SOFT	MEDIUM SOFT	MEDIUM SOFT	MEDIUM HARD
LENGTH OF HUSK.....	MEDIUM	MEDIUM	SHORT	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM
SMUT RESISTANCE.....	GOOD	GOOD	FAIR	GOOD	GOOD	GOOD	GOOD	EXCELL'T	GOOD
DROUGHT RESISTANCE.....	GOOD	GOOD	GOOD	GOOD	GOOD	EXCELL'T	EXCELL'T	GOOD	GOOD

PIONEER Hi-Bred Corn Co.
DES MOINES, IOWA